Chaetops, which is also unique in having white tips to the secondary coverts. Interestingly, the remicle in both *Chaetops* and *Achaetops* has a white tip, lacking in the other two genera.

In summary, the plumage of *Chaetops* differs from *Achaetops* in being strongly sexually dichromatic, in the more extensively rufous underparts, expansion of the white tips of the rectrices and the addition of white to the secondary coverts, and in the black throat of males. Although there is no real difference in the "softness" of the crown feathers, the tarsometatarsus is proportionately longer in *Chaetops* (44% vs. 37% of wing length), as Roberts (1922) maintained, although such variation in tarsal proportions occurs commonly within numerous other accepted genera of birds.

Both *Chaetops* and *Achaetops* are obligate inhabitants of rocky outcrops and are apparently quite similar in behaviour (Maclean 1985). It should be noted, however, that the Boulder Chat *Pinarornis plumosus*, another rock-dwelling passerine in southern Africa, is quite dissimilar in syrinx and osteology and appears to belong among the "proto-thrushes" including *Myadestes*, *Neocossyphus*, *Stizorhina*, and *Modulatrix* (Olson 1990). Because there were no grounds for dissociating *Achaetops* from *Chaetops* in the first place, and because a close relationship between *Achaetops* and either *Sphenoeacus* or *Melocichla* is not supported by osteology, there is no reason not to regard the similarities in plumage, osteology, and habits of the rockjumpers as indicative of relationship, with *Chaetops* being a larger, more ornately plumaged derivative of *Achaetops*. This relationship is probably best expressed at the generic level, with *Achaetops* Roberts, 1922, becoming a junior subjective synonym of *Chaetops* Swainson, 1832.

This brings us back to the question of the familial relationships of the re-expanded genus *Chaetops*. When I showed that the syrinx of *C. frenatus* was not thrush-like (Olson 1984), I merely suggested that the genus be returned to the Timaliidae, where it had nearly always been placed previously. On the other hand, ornithologists have been content for some time to accept *C. pycnopygius* as a warbler, so placement of the genus in the Sylviidae would seem equally plausible. Unfortunately, these are the two most ill-defined and problematical of the larger taxa of Old World passerines and no diagnostic characters have been identified that would permit a definitive decision to be made at this point.

Irwin (1985: 99) concurred that *Chaetops* (*sensu stricto*) belonged in the Timaliidae, citing as diagnostic of that family a tail that is "moderately to well graduated with the outermost pair of rectrices sharply truncated and falling considerably short of the others". This is not a convincing character, however, considering that numerous species of presumed Sylviidae have similar tails (e.g. *Melocichla mentalis*). As remarked by Irwin (1985), however, there are relatively few timaliids in Africa, and in southern Africa there is only the enigmatic *Lioptilornis* (*Lioptilus* auct.) and *Turdoides*, the latter being an Asian genus that has radiated secondarily in Africa. As he notes, *Chaetops* has no resemblance to either of these genera, as is also borne out by osteology.

By contrast, the Sylviidae have radiated rather extensively in Africa, but likewise none of the African members of that family seem obviously related to *Chaetops*.

Chaetops is very distinct osteologically from *Turdoides*, but that genus differs considerably from various other Timaliidae as well. As shown here, *Chaetops* is also very different osteologically from either of the genera of Sylviidae (*Sphenoeacus* and *Melocichla*) with which *Achaetops* has been associated. An informed solution to this systematic problem cannot be had without a great deal more study using various lines of evidence. Although some core group of Asian genera in the Timaliidae are probably monophyletic, the family has long been regarded as something of a wastebasket, so that the placement of an outlying genus in the Timaliidae carries with it a certain implicit ambiguity. For this reason, it is preferable to maintain *Chaetops* (including *Achaetops*) in the Timaliidae, rather than transferring it to the Sylviidae, which might convey a misleading impression of knowledge that we do not yet possess.

Acknowledgements

I am most grateful to the curators of the following institutions for lending specimens supplemental to those in the National Museum of Natural History, Smithsonian Institution, Washington (USNM): Transvaal Museum, Pretoria (TM); University of Michigan Museum of Zoology, Ann Arbor (UMMZ); Royal Ontario Museum, Toronto (ROM); National Museum of New Zealand, Wellington (NMNZ); Museum Royal de l'Afrique Centrale, Tervuren (MRAC).

References:

Bannerman, D. A. 1936. *Birds of Tropical West Africa*. Vol. 4. Crown Agents for the Colonies, London.

Bocage, J. V. B. du. 1868. Aves das possessões portuguesas d'Africa occidental que existem no Museu de Lisboa. *Jornal de Ciencias Mathematicas Physicas e Naturaes [Lisboa]* 2: 38–50.

Delacour, J. 1946. Les timaliinés. *Oiseau* 16: 7–36.

Gray, G. R. 1869. *Hand-List of Genera and Species of Birds, Distinguishing Those Contained in the British Museum*. Part I. British Museum, London.

Hall, B. P. & Moreau, R. E. 1970. *An Atlas of Speciation in African Passerine Birds*. British Museum (Natural History), London.

Hartlaub, G. 1869. Bericht über die Leistungen in der Naturgeschichte der Vögel während des Jahres 1868. *Archiv für Naturgeschichte* 35 (band 2): 105–132.

Irwin, M. P. S. 1985. *Chaetops* and the Afrotropical Timaliidae (Babblers) *Honeyguide* 3: 99–100.

Maclean, G. L. 1985. *Roberts' Birds of South Africa*. 5th edn. Trustees of the John Voelcker Bird Book Fund, Cape Town.

McLachlan, G. R. & Liversidge, R. 1957. *Roberts' Birds of South Africa*. Revised edn. Trustees of the South African Bird Book Fund, Cape Town.

McLachlan, G. R. & Liversidge, R. 1970. *Roberts' Birds of South Africa*. 3rd edn. Trustees of the John Voelcker Bird Book Fund, Cape Town.

McLachlan, G. R. & Liversidge, R. 1978. *Roberts' Birds of South Africa*. 4th edn. Trustees of the John Voelcker Bird Book Fund, Cape Town.

Olson, S. L. 1984. Syringeal morphology and relationships of *Chaetops* (Timaliidae) and certain South African Muscicapidae. *Ostrich* 55: 30–32.

Olson, S. L. 1990. Preliminary systematic notes on some Old World passerines. *Riv. Ital. Orn.* 59: 183–195.

Ripley, S. D. 1952. The thrushes. *Postilla* 13: 1–48.

Roberts, A. 1922. Review of the nomenclature of South African birds. *Annals of the Transvaal Museum* 8: 187–272.

Roberts, A. 1940. *Birds of South Africa*. H. F. & G. Witherby, London.
Sclater, W. L. 1930. *Systema Avium Æthiopicarum*. Taylor and Francis, London.
Sharpe, R. B. 1869. On the genus *Chaetops*. *Proc. Zool. Soc. London* 1869: 163–164.
Sharpe, R. B. 1883. *Catalogue of the Birds in the British Museum*. Vol. 7. British Museum (Natural History), London.
Strickland, H. E. & Sclater, P. L. 1852. List of a collection of birds procured by Mr C. T. Andersson in the Damara country in South Western Africa with notes. Pp. 141–160 in W. Jardine's *Contributions to Ornithology*, part 7.
Swainson, W. 1831 (=1832). Birds. *In* Swainson and Richardson, *Fauna Boreali Americana*. Part 2. Longman *et al.*, London.
Traylor, M. A., Jr. 1986. [African Sylviidae] *In* E. Mayr & G. W. Cotrell (eds), *Check-list of Birds of the World*. Vol. 11. Museum of Comparative Zoology, Cambridge, Massachusetts.
Tristram, H. B. 1870. Notes on some Old-World species of passerine birds. *Ibis* (2) 6: 493–497.
White, C. M. N. 1960. Notes on some African warblers. *Bull. Brit. Orn. Cl.* 80: 18–21.

Address: Department of Vertebrate Zoology, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560, U.S.A.

IN BRIEF

Differences in tarsal length between adult female Montagu's and Pallid Harriers: an easy method to separate specimens

by William S. Clark & Roger Clarke

Received 2 April 1997

Adult females of Pallid Harrier *Circus macrourus* and Montagu's Harrier *C. pygargus* are often misidentified in museum collections as the other because of their similar plumages. Both have dark brown upperparts, buffy to creamy, heavily streaked underparts, and similar tail patterns. Adult males and juveniles differ between species and are rather easy to distinguish.

Some differences between the species, especially adult females, have been pointed out by Svensson (1971) and illustrated in Bruun *et al.* (1986). These differences, as well as some new ones, are summarized by Forsman (1995). However, none of these references mention the difference in leg lengths.

One of us (WSC) noticed, from observing Pallid and Montagu's Harriers perched on bare ground near each other, that Montagu's appear to have much shorter legs, resulting in a more horizontal perch attitude, compared to the more upright stance of Pallid Harriers.

To test if there was a clear separation between species of this measure that could be used as a species indicator, we measured the tarsal length of a large sample of adult female specimens in the British Museum